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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,411	12/03/2001	Yukinobu Ishino	111205	5949

25944 7590 11/24/2003

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EXAMINER

MENDOZA, ROBERT J

ART UNIT PAPER NUMBER

3713

DATE MAILED: 11/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,411

Applicant(s)

ISHINO, YUKINOBU

Examiner

Robert J Mendoza

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 20-32 is/are rejected.
- 7) ☒ Claim(s) 18 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 17-19 are objected to because of the following informalities: claim 17, line 5, the term "plain" should read, "plane". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Sumi (USPN 5,734,807).

Regarding claims 1-4, 7, 9-17 and 20-32, Sumi, FIG. 1-3 and FIG. 16, discloses a game machine comprising a controller of a target, the target including at least four known points defining a plane, an image sensor having an image plane on which an image of the known points of the target are formed, a processor that calculates an attitude of the image plane relative to the plane defined by the known points of the target and a signal generator that generates a signal to be transmitted to the controller to cause a change in the target depending on the attitude calculated by the processor. Sumi, in col. 4:49-65 and FIG. 6, discloses the target includes a real object, wherein the controller causes movement of the real object depending on the attitude calculated by the processor in response to the signal from the signal generator. Sumi, in col. 4:15-67, col. 5:1-67, FIG. 1 and FIG. 16, discloses the controller includes an image display that displays an image of the target on the display plane, the display plane corresponding to the plane

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defined by the known points and the image display includes an image projector for projecting an image on a screen, the screen corresponding to the display plane. Sumi, in col. 7:15-67, col. 8:1-67, col. 9:1-67 and col. 11:1-67, discloses a range finder that measures the distance from the image plane to the display plane, wherein the signal generator generates the signal further depending on the distance measured by the range finder, and the processor further calculates the position of a point on the display plane, the image of which is formed at a predetermined position on the image plane, on the basis of the attitude and the output of the image sensor including the information of positions of the known points, and wherein the signal generator generates the signal further depending on the position calculated by the processor. Sumi, in FIG. 2, discloses a first processor for calculating a first data on the basis of the positions of the image of the known points on the image plane and second processor for calculating a second data on the basis of the first data and the positions of the image of the known points on the image plane, the attitude being given on the basis of the second data. Sumi, in col. 11:28-67 and col. 12:1-67, discloses a sighting device for the image of the target point on the display plane, wherein the image of the target point is formed at the predetermined position on the image if the image of the target point on the display plane is correctly sighted by the sighting device.

Regarding claims 5, 6 and 8, Sumi, in FIGS. 2-7, discloses the controller caused a movement of the image on the display plane and the controller cause a movement of the target depending on the attitude calculated by the processor in response to the signal from the signal generator.

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Allowable Subject Matter

Claims 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Mendoza whose telephone number is (703) 305-7345. The examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg, can be reached at (703) 308-1327. The USPTO official fax number is (703) 872-9306.

RM

RM
November 14, 2003


Teresa Walberg
Supervisory Patent Examiner
Group 3700